

CENTRAL ELECTRICITY REGULATORY COMMISSION

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Ref No.: 1/13/2013-Reg.Aff.(CA)/CERC

Date: 20 October 2016

Sub: Notice inviting Quotations for "Empanelment of Compliance Auditor in the area of Renewable Energy Certificate Mechanism"

Central Electricity Regulatory Commission (CERC), a statutory organization constituted under an Act of Parliament, proposes to empanel Compliance Auditors in the area of Renewable Energy Certificate (REC) Mechanism. The required qualifications, experience, scope of work and other detailed terms and conditions are contained in enclosed Terms of Reference (TOR).

2. Sealed quotations in the format prescribed in Annexure I, Appendix-"A" and Appendix- "B" are invited for the aforesaid purposes. The sealed bids clearly marked as "Technical" are required to be submitted in one envelope clearly mentioning in bold letters on top of the envelope

"QUOTATION FOR EMPANELMENT OF COMPLIANCE AUDITOR IN THE AREA OF RENEWABLE ENERGY CERTIFICATE MECHANISM".

3. The bids may be addressed to Assistant Chief (Admin), CERC so as to reach by 11th November, 2016. "Technical" bids will be opened by the Tender Opening Committee of CERC. Date and time of bid opening shall be notified separately. Bidders or their authorized representatives may remain present during opening of bids. Secretary, CERC reserves the right to modify/change the date and time of the receiving/opening of bids.

(Kamal Kishor)
Assistant Chief (Admin)

Encl : As above.

Empanelment of Compliance Auditors by Central Electricity Regulatory Commission in the area of Renewable Energy Certificate Mechanism: Terms of Reference (ToR)

1.0 Background:

1.1. The Electricity Act 2003 (the Act) stimulated the development of RE based power generation by mandating State Electricity Regulatory Commissions (SERC) with the function of RE promotion within the State. Under the Act, the SERCs set targets for obligated entities to purchase certain percentage of their total power requirement from renewable energy sources, also termed as Renewable Purchase Obligation (RPO). Although India is abundantly gifted with variety of renewable energy (RE) sources, not all States are endowed with same level of renewable energy sources. While some States have very high renewable energy potential, some States have very little renewable energy potential. Currently RPO is being fixed based on the renewable energy potential available in the State. As a result, the RPO Regulations developed by the SERCs differ from each other on many counts.

1.2. As per Tariff Policy 2016, (Clause 6.4 (1)(iii),
"It is desirable that purchase of energy from renewable sources of energy takes place more or less in the same proportion in different States. To achieve this objective in the current scenario of large availability of such resources only in certain parts of the country, an appropriate mechanism such as Renewable Energy Certificate (REC) would need to be promoted. Through such a mechanism, the renewable energy based generation companies can sell the electricity to local distribution licensee at the rates for conventional power and can recover the balance cost by selling certificates to other distribution companies and obligated entities enabling the latter to meet their renewable power purchase obligations. The REC mechanism should also have a solar specific REC. "

1.3. Renewable Energy Certificate (REC) mechanism is a market based instrument to promote renewable energy and facilitate renewable purchase obligations

(RPO) by obligated entities and thus is aimed at addressing the mismatch between availability of RE resources in State and the requirement of the obligated entities to meet their RPO.

1.4. CERC notified The Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (REC Regulations) on 14.01.2010 in fulfillment of its mandate to promote renewable sources of energy and development of market in electricity. Therefore, the REC framework was launched on 18.11.2010. Subsequently, Commission issued Orders on designation of **NLDC as Central Agency**, determination of Floor and Forbearance price of REC and detailed Procedures for implementation of REC mechanism, Fee & Charges payable under REC Mechanism. Four amendments to the Regulations have also been notified thereafter. As on 30th September 2016, 1223 projects accounting for 5381.62 MW had got accreditation by the Concerned State Agencies.

1.5. Regulation 13 of REC Regulations mandates for appointment of compliance auditors. Regulation 13(1) reads as under:

"13. Appointment of compliance auditors:

(1) The Commission may, in consultation with the Central Agency, appoint from time to time compliance auditors to inquire into and report on the compliance of these Regulations by the person applying for registration, or on the compliance by the renewable energy generators in regard to the eligibility of the Certificates and all matters connected thereto."

1.6. As required under the REC Regulations, the Commission vide its order dated 6.7.2012 (Suo-Motu Petition No. 154/2012) empanelled ten firms as Compliance Auditors. Thereafter, the Commission vide its order dated 22.4.2013 (Suo-Motu Petition No. 154/2012) had extended the validity of the empanelment as also the fees and other terms stipulated valid for next two years, i.e till 22.04.2015.

1.7. In order to meet the requirement of Regulations as quoted in para 1.5, the Central Commission has decided to empanel firms as Compliance Auditors in accordance with the provisions of Central Electricity Regulatory Commission

(Appointment of Consultants) Regulations, 2008 and the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and subsequent amendment(s) (hereafter REC Regulations).

2.0 Scope of the work assigned to the Compliance Auditor:

2.1 The Compliance Auditor shall inquire into and report on the compliance of REC Regulations by the person applying for registration, or on the compliance by the renewable energy generators with regard to the eligibility for issuance of Certificates and all matters connected thereto. The Compliance Auditor shall verify the following conditions (list of conditions is indicative) for all the projects:

2.1.1 Eligibility criteria

2.1.2 Verification of technology used

2.1.3 Renewable Energy source (as defined in Regulation 2 & 4 of RE Tariff Regulations for wind, biomass, cogeneration etc.)

2.1.4 To verify whether all the clearances required for setting up RE generation project are obtained and the validity thereof.

2.1.5 Type of Route (third party / APPC sale/ Self-Consumption) under which the project has been accredited.

2.1.6 Date of Commissioning (DOC) of the unit(s) of the plant.

2.1.7 To verify about any power sold to DISCOM at the rate higher than its pooled cost (indicating the approximate pooled rate for the year, as determined by the State Electricity Regulatory Commission). PPA Status : signing date/expiry date/no PPA. To ensure power is not being used by beneficiary for RPO compliance.

2.1.8 Verification of capacity of power plant, auxiliary consumption, voltage level, installation of special energy meter.

2.1.9 To ensure that the information submitted by the generator at the time of accreditation and registration is true.

2.1.10 To verify that compliance of the observations raised by the State Agency / any other inspecting agency / other competent authority is made and there is

- no failure in rectification of the defects
- 2.1.11 Metering/calibration Status
 - 2.1.12 To verify that there is no willful or prolonged default.
 - 2.1.13 To verify that there is no violation of terms / conditions / rules / regulations / Procedure of the State / Central Agency.
 - 2.1.14 To verify that Renewable Energy certificates are claimed as per the energy injected for generation after the date of registration by NLDC.
 - 2.1.15 Any other compliance required as per CERC REC Regulations and its amendments thereon
 - 2.1.16 Any other compliance matter as specified/directed by CERC.
 - 2.1.17 To verify and validate Accreditation and Registration of the generator, and Issuance and Redemption of RECs.
 - 2.1.18 To examine if the regulations notified by the Central Commission are fully complied with and identify and inform regarding non-compliances if any, to be further examined by the Central Commission under the provisions of Section 142 of the Electricity Act, 2003.
 - 2.1.19 Any other matter which Compliance Auditor deems fit needs to be reported and requires attention to be drawn of CERC

For Biomass based Rankine cycle power project and Bagasse based cogeneration projects;

- 2.1.20 Type of Boiler and its suitability for burning biomass fuel- comments in brief (after due observation at site).
- 2.1.21 To ensure about the actual fuel being used by spot inspection (with observation of minimum 1 hr. at the plant site).
- 2.1.22 What type of fuel is being fed in the Boiler?
 - a) If Biomass - its type.
 - b) If coal, give details.
 - c) If combination of Biomass & coal, what percentage of each fuel?
 - d) What is the consumption of above fuel in 1 hr with 100% steam generation (maintaining rated temperature & pressure) & what the generation of electricity/hour is?

- 2.1.23 Stock of total Biomass available at site
- 2.1.24 Stock of total coal available at site.
- 2.1.25 Whether the above availability of Biomass & coal tally with the register records maintained, give details and if not what is the difference?
- 2.1.26 Total Biomass & coal (separately) used for generation of power since the date of accreditation/registration as per the record, tallying with Truck/Tractor No., date of receipt, transportation payments etc.
- 2.1.27 Out of total fuel used (as above), what is the percentage of biomass and coal.
- 2.1.28 Whether coal used is within the permissible limit of 15% as per norms.
- 2.1.29 Whether the above fuel used tallies with the generation?
- 2.1.30 What is the average consumption of Biomass & coal and generation of power per day?
- 2.1.31 What is average consumption of secondary fuel?.
- 2.1.32 Tallying of Heat Rate with respect to fuel consumption & other observation.
- 2.1.33 Heat Rate of Turbine , Efficiency of Boiler, Station Heat Rate
- 2.1.34 Average GCV of fuel (taking into consideration Biomass and coal with respect to their quantity & GCV).
- 2.1.35 Assessed handling losses of fuel (biomass/coal) in percentage.
- 2.1.36 Actual fuel consumption per unit as worked out based on the records (maintained/ register) for the period from the date of registration for REC.
- 2.1.37 As per the calculation of Heat Rate, what is the average fuel consumption per unit?
- 2.1.38 Difference in fuel consumption per unit as per the record Vs Heat Rate calculation.
- 2.1.39 If the above variation is more than 5%, reason to be furnished what is the explanation of the developer?.
- 2.1.40 Verification of ash details to ascertain the fuel actually being used.(being ash analysis is an important aspect to countercheck the type of fuel being used).
- 2.1.41 Sample of ash to be collected and got it tested from the authorized Lab. to ascertain the type of fuel on the basis of the testing results
- 2.1.42 What is the % of ash of Biomass & coal (being used/separately) as per norms?.

- 2.1.43 Whether quantity of ash tally with the fuel combination & records?.
- 2.1.44 (Ash contents in Biomass fuel is hardly 4-8% depending upon the type of fuel, whereas it is more than 40% for F/G type coal).
- 2.1.45 Assessed quantity of ash lying available at site.
- 2.1.46 What is arrangement of disposal of ash & where being dumped (to check from records/register – about dispatch by trucks/trailers etc).?
- 2.1.47 How much quantity of ash disposed off (dumped to other area) as per records ash available at site / surrounding from the date of accreditation/registration for REC.?
- 2.1.48 Average quantity of ash being generated per month & quantity since the date of accreditation /Registration and to compare with the electricity being generated.
- 2.1.49 To verify from past history of biomass generation as to whether it has entered into any agreement for availing preferential tariff and what is the present status & whether now eligible for REC?.

3. Conflict of interest:

3.1. The Commission is of the view that consulting and advisory services to RE generators provided by the Compliance Auditors result in serious conflict of interest. Even if they do not perform both the services, i.e. REC advisory services and Compliance audit services, for the same client, by virtue of being in the market as a consultant and competing with other consultants, they are likely to be unduly influenced in the audit process. The Commission is of the view that such conflict of interest should be discouraged. As stated in order dated 10.12.2013 (321/SM/2013) , a firm once empanelled as Compliance Auditor shall be debarred from providing consultancy services related to REC to any of the RE generators. Also, NLDC shall call for a confirmation on affidavit from all Compliance Auditors on quarterly basis to the effect that they do not have conflict of interest with any of the RE generators and submit a report to the Commission by 30th of April, July, October and January every financial year.

3.2. Accordingly, the firms empanelled by the Commission shall be debarred from auditing of RE projects with which they have been associated in the past and

shall also be debarred from associating with such project developer in future on matters which may cause any conflict of interest.

4. Deliverables and duration of the Assignment:

4.1. The Deliverables and duration of the assignment shall be decided by the Central Agency.

4.2. In case of compliance audit of Central Agency/Power Exchange , the report shall be submitted to CERC only and a copy of the report shall be given to Central Agency/Power Exchange only after due permission of CERC.

4.3. In case of Compliance Audit of State Agencies/SLDCs with regard to REC Mechanism, the report shall be submitted to the concerned SERC and a copy of the same shall also be given to CERC/Central Agency.

5. Qualification Criteria:

5.1. The Compliance Auditor should be a firm having experience for a minimum period of five years in the field of auditing besides having adequate understanding of the electricity sector, institutions involved including Regulatory Commission, utilities, government institutions, State agencies and their roles and responsibilities etc.

5.2. The firm, in their proposed team should have persons with qualifications and experience in the following areas:

- a. Finance or accounts or commerce, and
- b. having qualifications and experience (minimum 5 years) in the field of engineering with specialization in generation, transmission or distribution of electricity, experience that demonstrates an adequate understanding of the electricity sector, institutions involved including Regulatory Commission, utilities, government institutions, State agencies and their roles and responsibilities.
- c. Proficiency in use of computer applications.

5.3. If the team of the Compliance Auditor changes during the course of the assignment, the newly appointed personnel should have similar qualifications and experience. Change of team member(s) must be communicated to the Central Agency within two weeks of such a change.

5.4. The firm should submit an undertaking that it has not been blacklisted / debarred from auditing by any Government / Semi-government / Quasi Judicial agencies.

6. Application and Evaluation Criteria:

6.1. The format of application is at **Annexure-I**.

6.2. The Compliance Auditor (Bidder) is required to submit two (2) copies of bids for Technical offer (each of which will be treated as original) duly sealed in envelope.

6.3. Technical component will carry 100% weightage.

6.4. The bids of the eligible bidders as per Clause 5 will be scrutinized by Consultancy Evaluation Committee (CEC) and the decision of the CEC would be final and binding in this matter. The technical performance may be evaluated based on the following model criteria:

Sl.No.	Technical Parameters**	Weight
1	Relevant Experience of the firm {in Renewable Energy generation/ Energy Audit in power generation (RE/Conventional)} (atleast 5 years)	0.3
2	Understanding scope of the assignment, Detailed approach & methodology, Work Plan (information must be provided as per format at Appendix – A)	0.4
3	Qualifications and experience of the key staff proposed (as per Clause 4) (information must be provided as per format at Appendix – B)	0.3

** Documentary proofs have to be submitted along with the bid.

6.5. The minimum qualifying marks in the Technical Evaluation will be 75% of the total score for technical component.

6.6. Only those bidders, who qualify technically as per Clause 6.4 & 6.5, would be considered for empanelment of Compliance Auditors.

6.7. Only successful bidder would be communicated the award of 'empanelment

of compliance auditor'.

6.8. The number of compliance auditor(s) (organisation/institution) in the panel will be determined by CERC depending upon the requirement.

6.9. The Validity of empanelment: Empanelment shall be reviewed by the Commission after two years from the date of such empanelment and it can be extended by the Commission for such period as may be decided by the Commission after ascertaining the technical capability as per para 6.6 above. The Commission may at its discretion, add or remove a Compliance Auditor from the panel.

7. Selection of the Compliance Auditor(s) by the Central Agency:

7.1. On selection of the Compliance auditors, the Commission will publish on its website a panel of Compliance Auditors who will conduct enquiry into and report on the compliance of REC Regulations by the person applying for registration, or on the compliance by the renewable energy generators in regard to the eligibility of the Certificates and all matters connected thereto.

7.2. The Commission may at its discretion, add or remove a Compliance Auditor.

7.3. Central Agency may choose Compliance Auditor(s) from the panel notified by the Commission from time to time for all tasks as envisaged in Para 7.1.

7.4. The Central Agency shall seek financial bids from all empanelled Compliance Auditors.

7.5. As per CERC order dated 6.7.2012 (Suo-Motu Petition No. 154/2012), the Central Agency shall submit proposal to the Commission on remuneration and charges payable to empanelled Compliance Auditors, based on the L1 price derived from the financial proposals received (refer clause 6.3). The fees shall be based on the assessment of man hour effort/requirement for the possible assignments and with due consideration of the requirements for auditing generating stations based on various RE technologies, location of the projects etc. Based on the proposal from Central Agency, the Commission shall fix remuneration and charges payable to the Compliance Auditors. After the fees have been fixed by the Commission, the Central Agency will formally engage the Compliance Auditor(s) for specific assignments after entering into agreement. The payment to the Compliance Auditor shall be made by the Central Agency.

7.6. The empanelled Compliance Auditors shall be required to offer audit services at the L1 price discovered during this process. All firms that confirm offering audit services at this price shall be designated as selected. If a firm is unable to participate at this price, it shall opt out of the selection process at this stage.

7.7. The Central Agency shall be responsible for monitoring and oversight over the functioning of the compliance auditors. Release of payment to the compliance auditor shall be made on satisfactory completion of the audit.

7.8. The designated firm(s) selected as Compliance Auditors should not have any conflict of interest with RE generators, as elaborated upon in clause 3 of this TOR.

7.9. The Commission has observed that in the previous selection procedure, few empanelled auditors did not accept the Letter of Award after being selected. In such a case in future, the empanelled auditor shall be debarred from participating in any future assignments related to CERC for a period of three years.

/ ANNEXURE – I /

DETAILED PROPOSAL FOR COMPLIANCE AUDIT UNDER REC
MECHANISM (TECHNICAL)

Note: Two (2) copies of the proposal shall be submitted to the Central Electricity Regulatory Commission along with a soft copy in word format in a pen drive .

I. GENERAL INFORMATION:

1. Title of the Proposed Assignment :

2. Name and address of the Compliance Auditor: (Organization/ Institution)

3. Name & Designation of the Key Person :

4. Contact address of the Key Person :
 - 4.1 Address :
 - 4.2 E-mail :
 - 4.3 Telephone :
 - 4.4 Fax :
 - 4.5 Mobile No. :

5. Net-worth/Turnover of the Organization/Institution (to be supported by Annual Statement of Accounts of last three Financial Years):

6. Details of Office and the available infrastructure (Also PAN/TAN No. and Service Tax No.):

II. TECHNICAL SPECIFICATIONS:

- 7. i. Department(s) of the organization/Institution(s) where the study of the compliance audit will be carried out.
- ii. Other department(s), if any, which will collaborate in this study/compliance audit.
- 8. Brief review of the experience in the relevant field (National and/or International) (if any)**.
- 9. Detailed Approach & Methodology for undertaking the assignment.
- 10. Facilities available for the proposed work in the applicant’s organization/institution
- 11. Name and Designation of the Proposed Team (also indicate the man-hour committed for each member of the team)
- 12. Biographical sketch of the Compliance Auditor Team (for every team member)
 - (i) Name
 - (ii) Designation
 - (iii) Date of Birth
 - (iv) Education and Experience;

(a) Academic Qualifications

Degree	University	Field(s)/Specialisation	Year

(b) Experience :

(1) Total Relevant Experience for the proposed assignment: Years

(2) Detailed Experience :

Institution	Topic of work done	Period

(v) Field of major interest

(vi) Additional information (if any)

** Documentary proofs have to be submitted along with the bid.

/ Appendix-‘A’ /

Based on the broad areas of work outlined in the ToR and bidder’s own experiences, bidders are required to provide details of bidder’s understanding and approach regarding the following in a maximum of 20 pages.

- Understanding of scope
- Planned approach and methodology to conduct the Audit
- Robustness of methodology
- Audit plan {for RE Generators/State Agency/Central Agency/SLDCs/Power Exchange(s)}
- Identifying and determining materiality of deviation
- Work Plan and timelines

/ Appendix-‘B’ /

Sl. No.	Name	Role	Educational Qualification	Experience (in years)	Area of Expertise	No. of relevant projects handled